

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL WITH STREET LIGHTING AT THE INTERSECTION OF MD 279 (ELKTON NEWARK RD) AND MD 277 (FLETCHWOOD RD) / STONEGATE BLVD IN CECIL COUNTY. THE MODIFICATION WILL UPGRADE THE EXISTING LOOP DETECTORS FOR PRESENCE DETECTION AND SIDE STREET PASSAGE DETECTION TO VIDEO DETECTORS. EXISTING LOOP DETECTORS FOR PASSAGE DETECTION WILL ALSO BE UPGRADED TO NON-INVASIVE DETECTORS. MD 279 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

1. THE INTERSECTION OPERATES IN A NEMA SIX (6) PHASE, FULLY-ACTUATED MODE. MD 279 APPROACHES OPERATE CONCURRENTLY. AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE IS PROVIDED FOR SOUTHBOUND MD 279 AND AN EXCLUSIVE LEFT TURN PHASE IS PROVIDED FOR NORTHBOUND MD 279. EASTBOUND MD 277 AND WESTBOUND STONEGATE BLVD APPROACHES OPERATE CONCURRENTLY.
2. AN EXISTING FULL-TRAFFIC-ACTUATED, EIGHT (8) PHASE CONTROLLER IN A NEMA SIZE "6" BASE MOUNTED CABINET SHALL BE UTILIZED. VIDEO DETECTION INTERFACE SHALL BE INSTALLED INTO THE CABINET BY SHA FORCES.

CONTACTS

DISTRICT	OFFICE OF TRAFFIC AND SAFETY
MR. RICHARD LINDSAY DISTRICT ENGINEER 410-810-3210	MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. ROBERT KIEL ASSISTANT DISTRICT ENGINEER - TRAFFIC 410-810-3240	MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. BARRY CLOTHIER ASSISTANT DISTRICT ENGINEER - UTILITIES 410-810-3275	MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS 410-787-7650
MR. WM NORRIS EMBERT ASSISTANT DISTRICT ENGINEER - CONSTRUCTION 410-810-3270	MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS 410-787-7670
MR. TERRY WRIGHT ASSISTANT DISTRICT ENGINEER - MAINTENANCE 410-810-3250	MS. DARLENE EIDE SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EA	[UPDATED] 4 CHANNEL DETECTOR AMPLIFIER
9046	1 EA	[UPDATED] DETECTOR RACK RETROFIT
9087	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 5-8 CAMERAS

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

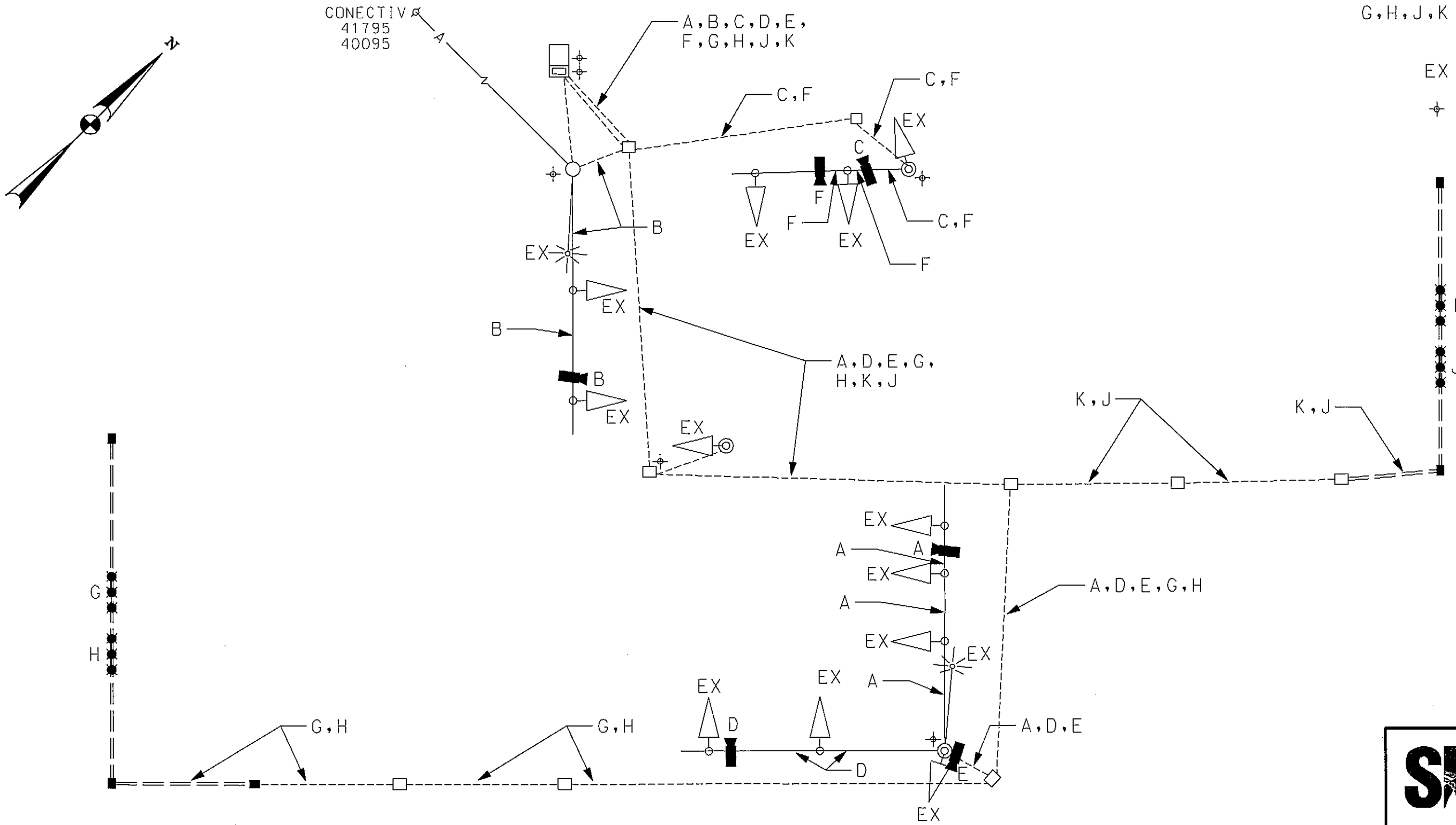
ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
8006	1 EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT PER ASSIGNMENT
8007	6 EA	VIDEO DETECTION CAMERA & CABLE
8011	100 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - BORED
8013	55 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - TRENCHED
8018	4 EA	NONINVASIVE DETECTOR UP TO 1000' LEAD IN CABLE
8019	5 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE

C. SHA FORCES SHALL REMOVE THE EXISTING LOOP DETECTOR AMPLIFIERS AND ASSOCIATED EQUIPMENT FROM THE CONTROLLER CABINET. ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

NO PHASE CHANGE

WIRING DIAGRAM



WIRING KEY

- A,B,C,D,E,F - VIDEO DETECTION CABLE
G,H,J,K - NON-INVASIVE DETECTOR LEAD-IN CABLE
EX - EXISTING CABLE
+ - EXISTING GROUND ROD

TOD NO:XX356-01
SHA NO:AX885K51
US 50@VARIOUS LOCATION



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 279 AND MD 277 /STONEGATE BLVD
DETECTION UPGRADE
ELKTON, MD

GENERAL INFORMATION SHEET

SCALE N.T.S. DATE SEPTEMBER 2, 2009 CONTRACT NO. XX3566168

DESIGNED BY M. FUKUI COUNTY CECIL
DRAWN BY M. FUKUI LOGMILE 07027904.91
CHECKED BY TIMS NO. J601
F.A.P. NO. TOD NO.

TS NO. 1541G DRAWING SG-10 OF 10 SHEET NO. 10 OF 10